10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-SRY Antibody

Catalog # AP51535

Product Information

Application	WB, IHC, IF/IC
Primary Accession	Q05066
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	23884

Additional Information

Gene ID	6736
Other Names	TDF; Sex-determining region Y protein; Testis-determining factor
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human SRY. The exact sequence is proprietary.
Dilution	WB~~ 1:1000 IHC~~1:100~500 IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

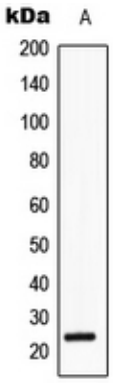
Name	SRY {ECO:0000303|PubMed:1695712, ECO:0000312|HGNC:HGNC:11311}
Function	Transcriptional regulator that controls a genetic switch in male development (PubMed:11563911). It is necessary and sufficient for initiating male sex determination by directing the development of supporting cell precursors (pre-Sertoli cells) as Sertoli rather than granulosa cells (PubMed:16414182, PubMed:16996051). Involved in different aspects of gene regulation including promoter activation or repression (PubMed:9525897). Binds to the DNA consensus sequence 5'- [AT]AACAA[AT]-3' (PubMed:11563911, PubMed:1425584, PubMed:15170344, PubMed:8159753, PubMed:8265659). SRY HMG box recognizes DNA by partial intercalation in the minor groove and promotes DNA bending (PubMed:11563911, PubMed:1425584, PubMed:15170344, PubMed:16762365, PubMed:8159753, PubMed:8265659). Also involved in pre-mRNA splicing (PubMed:11818535). In male adult brain involved in the maintenance of motor functions of dopaminergic neurons (By similarity).
Cellular Location	Nucleus speckle. Cytoplasm Nucleus. Note=Acetylation contributes to its

nuclear localization and deacetylation by HDAC3 induces a cytoplasmic delocalization (PubMed:15297880). Colocalizes with SOX6 in speckles (PubMed:11818535). Colocalizes with CAML in the nucleus (PubMed:15746192). Colocalizes in the nucleus with ZNF208 isoform KRAB- O and tyrosine hydroxylase (TH) (By similarity). Nuclear import is facilitated by XPO4, a protein that usually acts as a nuclear export signal receptor (PubMed:19349578). {ECO:0000250|UniProtKB:Q05738, ECO:0000269|PubMed:11818535, ECO:0000269|PubMed:15297880, ECO:0000269|PubMed:15746192, ECO:0000269|PubMed:19349578}

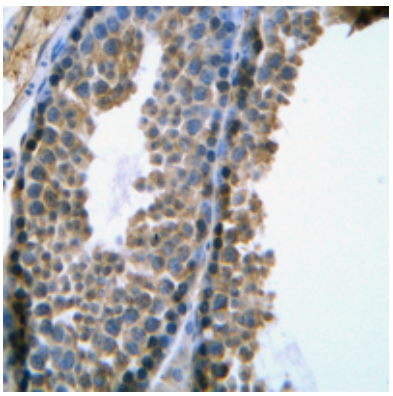
References

Sinclair A.H.,et al.Nature 346:240-244(1990).
Su H.,et al.Am. J. Hum. Genet. 52:24-38(1993).
Behlke M.A.,et al.Genomics 17:736-739(1993).
Whitfield L.S.,et al.Genomics 27:306-311(1995).
Ferrari S.,et al.EMBO J. 11:4497-4506(1992).

Images

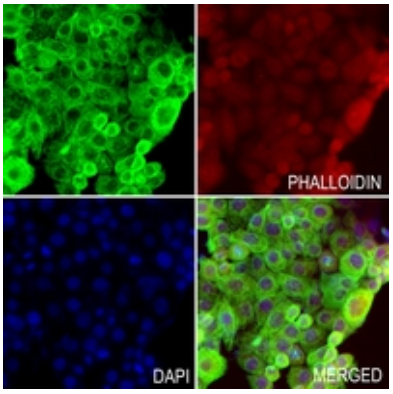


Western blot analysis of SRY expression in HeLa (A) whole cell lysates. (Predicted band size: 23 kD; Observed band size: 24 kD)



Immunohistochemical analysis of SRY staining in human testis formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

Immunofluorescent analysis of SRY staining in Hela cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain



the cell nuclei (blue).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.